

REMARKS/ARGUMENTS

The Office Action mailed August 10, 1004 has been reviewed and carefully considered. Claims 4 and 20 are canceled. Claims 1, 2, 5, 8, 13, 17, 18, and 21 have been amended. Claims 22-24 are added. Claims 1-3, 5-19, and 21-24 are pending in this application, with claims 1, 13, and 18 being the only independent claims. Reconsideration of the above-identified application, as herein amended and in view of the following remarks, is respectfully requested.

Claim Objections

In the Office Action mailed August 10, 2004, claims 1 and 13 are objected to as containing minor informalities. Claims 1 and 13 have been amended in accordance with the Examiner's suggestions with one exception. The phrase "the plane" is deleted from independent claims 1 and 13. In view of the amendments, the objections of claims 1 and 13 should now be withdrawn.

Rejections Under 35 U.S.C. §112

Claims 1-3, 5-19, and 21 stand rejected under 35 U.S.C. §112, first paragraph, because the Examiner states that the recitation requiring six plane hinges in independent claims 1, 13, and 18 is not supported in the specification. Independent claims 1, 13, and 18 have each been amended to cancel the recitation that the six hinges are plane hinges. New dependent claims 22, 23, and 24, which depend from independent claims 1, 13, and 18, respectively, are added to recite that three of the six hinges in the supporting device are plane hinges. As stated in the Office Action, Figs. 4A and 4B of the application show three plane hinges, i.e., G2, G4, and G5.

The Examiner further states that the recitation in independent claim 1 that the second end of the supporting device being connected to a rotational hinge is not supported because the embodiments having six hinges in Figs. 4A and 4B are not connected to a separate rotational hinge.

Independent claim 1 has been amended to recite that the one of the six hinges at the second end of the supporting device is a rotational hinge. As shown in Figs. 4A and 4B, hinge G6 at the second end of the supporting device is a rotational hinge.

In view of the above amendments and remarks, the rejection of the claims under 35 U.S.C. §112, first paragraph, should now be withdrawn.

Claims 1, 2, 8, 13, and 18 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite. In claims 1, 13, and 18, the phrase "may" has been canceled from the claims. In claims 2 and 8, the term "notably" has been canceled from the claims. Dependent claim 17, though not rejected, has also been amended to cancel the term "can". In view of the above amendments, the rejection of claims 1, 2, 8, 13, and 18 under 35 U.S.C. §112, second paragraph, should now be withdrawn.

Rejections over Prior Art

Claims 1-3, 7, 11, and 17-19 stand rejected under 35 U.S.C. §103 as unpatentable over U.S. Patent No. 5,901,200 (Krause) in view of FR 2 645 007 (Jarin).

Claim 5 stands rejected under 35 U.S.C. §103 as unpatentable over Krause and Jarin in further view of U.S. Patent No. 3,281,598 (Hollstein).

Claim 6 stands rejected under 35 U.S.C. §103 as unpatentable over Krause and Jarin in further view of U.S. Patent No. 3,784,837 (Holmstrom).

Claims 8, 10, 14, and 15 stand rejected under 35 U.S.C. §103 as unpatentable over Krause and Jarin in further view of U.S. Patent No. 4,987,583 (Travanty).

Claim 9 stands rejected under 35 U.S.C. §103 as unpatentable over Krause, Jarin, and Travanty in further view of U.S. Patent No. 5,485,502 (Hinton).

Claim 12 stands rejected under 35 U.S.C. §103 as unpatentable over Krause and Jarin in further view of Hinton.

Claims 13 and 21 stand rejected under 35 U.S.C. §103 as unpatentable over Krause, Jarin and Holstrom and further in view of U.S. Patent No. 5,410,584 (Schaefer).

Claim 16 stands rejected under 35 U.S.C. §103 as unpatentable over Krause Jarin and further in view of JP 11-285492 (Ninomiya).

Before discussing the cited prior art and the Examiner's rejections of the claims in view of that art, a brief summary of the present invention is appropriate. The present invention relates to an X-ray device provided with an X-ray source and an X-ray detector which are mounted at different ends of a common holding device. The goal of the invention is to provide an X-ray device that is as flexible as possible (see page 2, lines 1-3 of the specification). Figs. 4a and 4b of the present specification show an embodiment of the invention in which a support device has seven connection pieces A_1 to A_7 connected to one another by respective hinges G_1 to G_6 (see page 5, lines 3-7). Each of the hinges G_1 to G_6 enables rotation about an axis of rotation such that the supporting device is rotatable about six separate axes (page 5, lines 7-9). The specification defines this embodiment as a 6-axes flexible arm robot.

Each of the independent claims 1, 13, and 18 recites "serially interconnected supporting members connected by six hinges, each of the hinges enabling rotation about an axis of rotation so that the supporting device has six separate axes of rotation". Support for this amendment is in Figs. 4a and 4b and at page 5, lines 3-15 of the specification.

Each of the independent claims 1 and 18 is rejected as obvious over Krause in view of Jarin. As stated in the Office Action, Krause fails to teach or suggest that the supporting device has six hinges so that the supporting device has six separate axes of rotation. The Office

Action states that Jarin discloses six hinges. However, the presently claims invention recites that the X-ray source and X-ray detector are mounted on a holding device and that a supporting device having six hinges connects the holding device to a room. The six hinges of Jarin can not be considered to be on the supporting device. Jarin discloses a holding device having arms 20, 16, 17, and 20' for holding a source 23 and detector 25. Therefore, the hinges 22, 19, 19' and 22 of Jarin connected to the arms 20, 16, 17, and 20' must be considered part of the holding device and not part of the supporting device. Since neither Krause nor Jarin discloses a supporting device having six hinges, it is respectfully submitted that independent claims 1 and 18 are allowable over Krause in view of Jarin.

Independent claim 13 is rejected as obvious over Krause in view of Jarin and Schaefer. However, Schaefer fails to teach or suggest what Krause and Jarin lack. Schaefer discloses a support for a radiation transmitter but fails to show six hinges. Accordingly, independent claim 13 is allowable over Krause in view of Jarin and Schaefer.

Dependent claims 3, 5-12, 14-17, 19, and 21-24, each being dependent on one of independent claims 1, 13, and 18, are deemed allowable for the same reasons expressed above with respect to independent claim 1, 13, and 18.

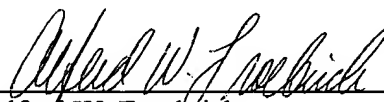
The application is now deemed to be in condition for allowance and notice to that effect is solicited.

A check in the amount \$36.00 is enclosed in payment for the addition of two new claims in excess of twenty.

It is believed that no additional fees or charges are required at this time in connection with the present application. However, if any additional fees or charges are required at this time, they may be charged to our Patent and Trademark Office Deposit Account No. 03-2412.

Respectfully submitted,

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